AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (original) A radio terminal unit which sends a radio base station a PS-Poll as a control packet for requesting delivery so as to receive packets buffered by the radio base station, comprising:

a communication control section;

a radio interface section; and

a PS-Poll transmission timing changer for changing the timing of transmission of the PS-Poll according to the operation mode of one or more communication applications which are running on the radio terminal unit.

2. (original) A radio terminal unit which sends a radio base station a PS-Poll as a control packet for requesting delivery so as to receive packets buffered by the radio base station, comprising:

a communication control section;

a radio interface section; and

a PS-Poll transmission timing changer for changing the timing of transmission of the PS-Poll according to the operation mode of one or more communication applications which are running on the radio terminal unit, wherein:

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the PS-Poll transmission timing changer determines the timing of transmission of the PS-Poll so that the PS-Poll is transmitted after transmission of data from the communication application.

3. (currently amended) A radio terminal unit which sends a radio base station a PS-Poll as a control packet for requesting delivery so as to receive packets buffered by the radio base station, comprising:

a communication control section;

a radio interface section; and

a PS-Poll transmission timing changer for changing the timing of transmission of the PS-Poll according to the operation mode of one or more communication applications which are running on the radio terminal unit, wherein:

the PS-Poll transmission timing changer determines whether there is a communication application that requires real-time processing;

when there is at least one communication application that requires real-time processing, the communication control section transmits the PS-Poll to the radio base station, and turns on the power of the radio interface section and transmits the PS-Poll to the radio base station so as to receive packets buffered by the radio base station; and

when there is no communication application that requires real-time processing, the communication control section

turns off the power of the radio interface section, and carries out intermittent receiving operation based on beacons transmitted from the radio base station.

4. (currently amended) A radio terminal unit which sends a radio base station a PS-Poll as a control packet for requesting delivery so as to receive packets buffered by the radio base station, comprising:

a communication control section;

a radio interface section; and

a PS-Poll transmission timing changer for changing the timing of transmission of the PS-Poll according to the operation mode of one or more communication applications which are running on the radio terminal unit, wherein:

the PS-Poll transmission timing changer determines the timing of transmission of the PS-Poll so that the PS-Poll is transmitted after transmission of data from the communication application;

the PS-Poll transmission timing changer determines whether there is a communication application that requires real-time processing;

when there is at least one communication application that requires real-time processing, the communication control section ~~transmits the PS-Poll to the radio base station, and~~ turns on the power of the radio interface section <u>and transmits</u>

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the PS-Poll to the radio base station so as to receive packets buffered by the radio base station; and

when there is no communication application that requires real-time processing, the communication control section turns off the power of the radio interface section, and carries out intermittent receiving operation based on beacons transmitted from the radio base station.

5. (currently amended) A radio terminal unit which sends a radio base station a PS-Poll as a control packet for requesting delivery so as to receive packets buffered by the radio base station, comprising:

a communication control section;

a radio interface section; and

a PS-Poll transmission timing changer for changing the timing of transmission of the PS-Poll according to the operation mode of one or more communication applications which are running on the radio terminal unit, wherein:

the PS-Poll transmission timing changer determines whether there is a communication application that requires real-time processing;

when there is at least one communication application that requires real-time processing, the communication control section ~~transmits the PS-Poll to the radio base station, and~~ turns on the power of the radio interface section <u>and transmits</u>

the PS-Poll to the radio base station so as to receive packets

buffered by the radio base station;

when there is no communication application that

requires real-time processing, the communication control section

turns off the power of the radio interface section, and carries

out intermittent receiving operation based on beacons transmitted

from the radio base station; and

the communication control section repeatedly receives

the packets until no buffered packet remains in the radio base

station by the PS-Poll, and turns off the power of the radio

interface section when there is no buffered packet left.

6. (currently amended) A radio terminal unit which

sends a radio base station a PS-Poll as a control packet for

requesting delivery so as to receive packets buffered by the

radio base station, comprising:

a communication control section;

a radio interface section; and

a PS-Poll transmission timing changer for changing the

timing of transmission of the PS-Poll according to the operation

mode of one or more communication applications which are running

on the radio terminal unit, wherein:

the PS-Poll transmission timing changer determines the

timing of transmission of the PS-Poll so that the PS-Poll is

transmitted after transmission of data from the communication

application;

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the PS-Poll transmission timing changer determines whether there is a communication application that requires real-time processing;

when there is at least one communication application that requires real-time processing, the communication control section ~~transmits the PS-Poll to the radio base station, and~~ turns on the power of the radio interface section <u>and transmits the PS-Poll to the radio base station</u> so as to receive packets buffered by the radio base station;

when there is no communication application that requires real-time processing, the communication control section turns off the power of the radio interface section, and carries out intermittent receiving operation based on beacons transmitted from the radio base station; and

the communication control section repeatedly receives the packets until no buffered packet remains in the radio base station by the PS-Poll, and turns off the power of the radio interface section when there is no buffered packet left.

7. (currently amended) A radio terminal unit which sends a radio base station a PS-Poll as a control packet for requesting delivery so as to receive packets buffered by the radio base station, comprising:

a communication control section;

a radio interface section; and

a PS-Poll transmission timing changer for changing the timing of transmission of the PS-Poll according to the operation mode of one or more communication applications which are running on the radio terminal unit, wherein:

the PS-Poll transmission timing changer determines whether there is a communication application that requires real-time processing based on information as to whether real-time processing is necessary or unnecessary attached to the data of each communication application;

when there is at least one communication application that requires real-time processing, the communication control section ~~transmits the PS-Poll to the radio base station, and~~ turns on the power of the radio interface section and transmits the PS-Poll to the radio base station so as to receive packets buffered by the radio base station; and

when there is no communication application that requires real-time processing, the communication control section turns off the power of the radio interface section, and carries out intermittent receiving operation based on beacons transmitted from the radio base station.

8. (currently amended)   A radio terminal unit which sends a radio base station a PS-Poll as a control packet for requesting delivery so as to receive packets buffered by the radio base station, comprising:

a communication control section;

a radio interface section; and

a PS-Poll transmission timing changer for changing the timing of transmission of the PS-Poll according to the operation mode of one or more communication applications which are running on the radio terminal unit, wherein:

the PS-Poll transmission timing changer determines the timing of transmission of the PS-Poll so that the PS-Poll is transmitted after transmission of data from the communication application;

the PS-Poll transmission timing changer determines whether there is a communication application that requires real-time processing based on information as to whether real-time processing is necessary or unnecessary attached to the data of each communication application;

when there is at least one communication application that requires real-time processing, the communication control section ~~transmits the PS-Poll to the radio base station, and~~ turns on the power of the radio interface section <u>and transmits the PS-Poll to the radio base station</u> so as to receive packets buffered by the radio base station; and

when there is no communication application that requires real-time processing, the communication control section turns off the power of the radio interface section, and carries out intermittent receiving operation based on beacons transmitted from the radio base station.

9. (currently amended) A radio terminal unit which sends a radio base station a PS-Poll as a control packet for requesting delivery so as to receive packets buffered by the radio base station, comprising:

a communication control section;

a radio interface section; and

a PS-Poll transmission timing changer for changing the timing of transmission of the PS-Poll according to the operation mode of one or more communication applications which are running on the radio terminal unit, wherein:

the PS-Poll transmission timing changer determines whether there is a communication application that requires real-time processing based on information as to whether real-time processing is necessary or unnecessary attached to the data of each communication application;

when there is at least one communication application that requires real-time processing, the communication control section ~~transmits the PS-Poll to the radio base station, and~~ turns on the power of the radio interface section <u>and transmits the PS-Poll to the radio base station</u> so as to receive packets buffered by the radio base station;

when there is no communication application that requires real-time processing, the communication control section turns off the power of the radio interface section, and carries

out intermittent receiving operation based on beacons transmitted from the radio base station; and

the communication control section repeatedly receives the packets until no buffered packet remains in the radio base station by the PS-Poll, and turns off the power of the radio interface section when there is no buffered packet left.

10. (currently amended) A radio terminal unit which sends a radio base station a PS-Poll as a control packet for requesting delivery so as to receive packets buffered by the radio base station, comprising:

a communication control section;

a radio interface section; and

a PS-Poll transmission timing changer for changing the timing of transmission of the PS-Poll according to the operation mode of one or more communication applications which are running on the radio terminal unit, wherein:

the PS-Poll transmission timing changer determines the timing of transmission of the PS-Poll so that the PS-Poll is transmitted after transmission of data from the communication application;

the PS-Poll transmission timing changer determines whether there is a communication application that requires real-time processing based on information as to whether real-time processing is necessary or unnecessary attached to the data of each communication application;

when there is at least one communication application that requires real-time processing, the communication control section ~~transmits the PS-Poll to the radio base station, and~~ turns on the power of the radio interface section <u>and transmits the PS-Poll to the radio base station</u> so as to receive packets buffered by the radio base station;

when there is no communication application that requires real-time processing, the communication control section turns off the power of the radio interface section, and carries out intermittent receiving operation based on beacons transmitted from the radio base station; and

the communication control section repeatedly receives the packets until no buffered packet remains in the radio base station by the PS-Poll, and turns off the power of the radio interface section when there is no buffered packet left.

11. (currently amended) A radio terminal unit which sends a radio base station a PS-Poll as a control packet for requesting delivery so as to receive packets buffered by the radio base station, comprising:

a communication control section;

a radio interface section; and

a PS-Poll transmission timing changer for changing the timing of transmission of the PS-Poll according to the operation mode of one or more communication applications which are running on the radio terminal unit, wherein:

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the PS-Poll transmission timing changer detects a changeover in the communication applications, and determines whether there is a communication application that requires real-time processing each time the changeover is carried out;

when there is at least one communication application that requires real-time processing, the communication control section ~~transmits the PS-Poll to the radio base station, and~~ turns on the power of the radio interface section and transmits the PS-Poll to the radio base station so as to receive packets buffered by the radio base station; and

when there is no communication application that requires real-time processing, the communication control section turns off the power of the radio interface section, and carries out intermittent receiving operation based on beacons transmitted from the radio base station.

12. (currently amended) A radio terminal unit which sends a radio base station a PS-Poll as a control packet for requesting delivery so as to receive packets buffered by the radio base station, comprising:

a communication control section;

a radio interface section; and

a PS-Poll transmission timing changer for changing the timing of transmission of the PS-Poll according to the operation mode of one or more communication applications which are running on the radio terminal unit, wherein:

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the PS-Poll transmission timing changer determines the timing of transmission of the PS-Poll so that the PS-Poll is transmitted after transmission of data from the communication application;

the PS-Poll transmission timing changer detects a changeover in the communication applications, and determines whether there is a communication application that requires real-time processing each time the changeover is carried out;

when there is at least one communication application that requires real-time processing, the communication control section ~~transmits the PS-Poll to the radio base station, and~~ turns on the power of the radio interface section <u>and transmits the PS-Poll to the radio base station</u> so as to receive packets buffered by the radio base station; and

when there is no communication application that requires real-time processing, the communication control section turns off the power of the radio interface section, and carries out intermittent receiving operation based on beacons transmitted from the radio base station.

13. (currently amended) A radio terminal unit which sends a radio base station a PS-Poll as a control packet for requesting delivery so as to receive packets buffered by the radio base station, comprising:

a communication control section;

a radio interface section; and

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a PS-Poll transmission timing changer for changing the timing of transmission of the PS-Poll according to the operation mode of one or more communication applications which are running on the radio terminal unit, wherein:

the PS-Poll transmission timing changer detects a changeover in the communication applications, and determines whether there is a communication application that requires real-time processing each time the changeover is carried out;

when there is at least one communication application that requires real-time processing, the communication control section ~~transmits the PS-Poll to the radio base station, and~~ turns on the power of the radio interface section <u>and transmits the PS-Poll to the radio base station</u> so as to receive packets buffered by the radio base station;

when there is no communication application that requires real-time processing, the communication control section turns off the power of the radio interface section, and carries out intermittent receiving operation based on beacons transmitted from the radio base station; and

the communication control section repeatedly receives the packets until no buffered packet remains in the radio base station by the PS-Poll, and turns off the power of the radio interface section when there is no buffered packet left.

14. (currently amended) A radio terminal unit which sends a radio base station a PS-Poll as a control packet for

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requesting delivery so as to receive packets buffered by the radio base station, comprising:

a communication control section;

a radio interface section; and

a PS-Poll transmission timing changer for changing the timing of transmission of the PS-Poll according to the operation mode of one or more communication applications which are running on the radio terminal unit, wherein:

the PS-Poll transmission timing changer determines the timing of transmission of the PS-Poll so that the PS-Poll is transmitted after transmission of data from the communication application;

the PS-Poll transmission timing changer detects a changeover in the communication applications, and determines whether there is a communication application that requires real-time processing each time the changeover is carried out;

when there is at least one communication application that requires real-time processing, the communication control section ~~transmits the PS-Poll to the radio base station, and~~ turns on the power of the radio interface section <u>and transmits the PS-Poll to the radio base station</u> so as to receive packets buffered by the radio base station;

when there is no communication application that requires real-time processing, the communication control section turns off the power of the radio interface section, and carries

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out intermittent receiving operation based on beacons transmitted from the radio base station; and

the communication control section repeatedly receives the packets until no buffered packet remains in the radio base station by the PS-Poll, and turns off the power of the radio interface section when there is no buffered packet left.

15. (currently amended) A radio terminal unit which sends a radio base station a PS-Poll as a control packet for requesting delivery so as to receive packets buffered by the radio base station, comprising:

a communication control section;

a radio interface section; and

a PS-Poll transmission timing changer for changing the timing of transmission of the PS-Poll according to the operation mode of one or more communication applications which are running on the radio terminal unit, wherein:

the PS-Poll transmission timing changer detects a changeover in the communication applications, and determines whether there is a communication application that requires real-time processing based on information as to whether real-time processing is necessary or unnecessary attached to the data of each communication application every time the changeover is carried out;

when there is at least one communication application that requires real-time processing, the communication control

section ~~transmits the PS-Poll to the radio base station, and~~ turns on the power of the radio interface section <u>and transmits the PS-Poll to the radio base station</u> so as to receive packets buffered by the radio base station; and

when there is no communication application that requires real-time processing, the communication control section turns off the power of the radio interface section, and carries out intermittent receiving operation based on beacons transmitted from the radio base station.

16. (currently amended) A radio terminal unit which sends a radio base station a PS-Poll as a control packet for requesting delivery so as to receive packets buffered by the radio base station, comprising:

a communication control section;

a radio interface section; and

a PS-Poll transmission timing changer for changing the timing of transmission of the PS-Poll according to the operation mode of one or more communication applications which are running on the radio terminal unit, wherein:

the PS-Poll transmission timing changer determines the timing of transmission of the PS-Poll so that the PS-Poll is transmitted after transmission of data from the communication application;

the PS-Poll transmission timing changer detects a changeover in the communication applications, and determines

whether there is a communication application that requires real-time processing based on information as to whether real-time processing is necessary or unnecessary attached to the data of each communication application every time the changeover is carried out;

when there is at least one communication application that requires real-time processing, the communication control section ~~transmits the PS-Poll to the radio base station, and~~ turns on the power of the radio interface section <u>and transmits the PS-Poll to the radio base station</u> so as to receive packets buffered by the radio base station; and

when there is no communication application that requires real-time processing, the communication control section turns off the power of the radio interface section, and carries out intermittent receiving operation based on beacons transmitted from the radio base station.

17. (currently amended) A radio terminal unit which sends a radio base station a PS-Poll as a control packet for requesting delivery so as to receive packets buffered by the radio base station, comprising:

a communication control section;

a radio interface section; and

a PS-Poll transmission timing changer for changing the timing of transmission of the PS-Poll according to the operation

mode of one or more communication applications which are running on the radio terminal unit, wherein:

the PS-Poll transmission timing changer detects a changeover in the communication applications, and determines whether there is a communication application that requires real-time processing based on information as to whether real-time processing is necessary or unnecessary attached to the data of each communication application every time the changeover is carried out;

when there is at least one communication application that requires real-time processing, the communication control section ~~transmits the PS-Poll to the radio base station, and~~ turns on the power of the radio interface section <u>and transmits the PS-Poll to the radio base station</u> so as to receive packets buffered by the radio base station;

when there is no communication application that requires real-time processing, the communication control section turns off the power of the radio interface section, and carries out intermittent receiving operation based on beacons transmitted from the radio base station; and

the communication control section repeatedly receives the packets until no buffered packet remains in the radio base station by the PS-Poll, and turns off the power of the radio interface section when there is no buffered packet left.

18. (currently amended) A radio terminal unit which sends a radio base station a PS-Poll as a control packet for requesting delivery so as to receive packets buffered by the radio base station, comprising:

a communication control section;

a radio interface section; and

a PS-Poll transmission timing changer for changing the timing of transmission of the PS-Poll according to the operation mode of one or more communication applications which are running on the radio terminal unit, wherein:

the PS-Poll transmission timing changer determines the timing of transmission of the PS-Poll so that the PS-Poll is transmitted after transmission of data from the communication application;

the PS-Poll transmission timing changer detects a changeover in the communication applications, and determines whether there is a communication application that requires real-time processing based on information as to whether real-time processing is necessary or unnecessary attached to the data of each communication application every time the changeover is carried out;

when there is at least one communication application that requires real-time processing, the communication control section transmits the PS-Poll to the radio base station, and turns on the power of the radio interface section and transmits

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the PS-Poll to the radio base station so as to receive packets

buffered by the radio base station;

when there is no communication application that

requires real-time processing, the communication control section

turns off the power of the radio interface section, and carries

out intermittent receiving operation based on beacons transmitted

from the radio base station; and

the communication control section repeatedly receives

the packets until no buffered packet remains in the radio base

station by the PS-Poll, and turns off the power of the radio

interface section when there is no buffered packet left.

19. (original) The radio terminal unit claimed in claim

11, wherein:

when the PS-Poll transmission timing changer detects a

transition from a real-time processing unnecessary state, in

which no communication application requires real-time processing,

to a real-time processing necessary state, in which there is at

least one communication application that requires real-time

processing, the communication control section controls the radio

interface section to transmit the PS-Poll using a timer value

unrelated to a beacon interval.

20. (original) The radio terminal unit claimed in claim

12, wherein:

when the PS-Poll transmission timing changer detects a

transition from a real-time processing unnecessary state, in

which no communication application requires real-time processing, to a real-time processing necessary state, in which there is at least one communication application that requires real-time processing, the communication control section controls the radio interface section to transmit the PS-Poll using a timer value unrelated to a beacon interval.

21. (original) The radio terminal unit claimed in claim 13, wherein:

when the PS-Poll transmission timing changer detects a transition from a real-time processing unnecessary state, in which no communication application requires real-time processing, to a real-time processing necessary state, in which there is at least one communication application that requires real-time processing, the communication control section controls the radio interface section to transmit the PS-Poll using a timer value unrelated to a beacon interval.

22. (original) The radio terminal unit claimed in claim 14, wherein:

when the PS-Poll transmission timing changer detects a transition from a real-time processing unnecessary state, in which no communication application requires real-time processing, to a real-time processing necessary state, in which there is at least one communication application that requires real-time processing, the communication control section controls the radio

interface section to transmit the PS-Poll using a timer value unrelated to a beacon interval.

23. (original) The radio terminal unit claimed in claim 15, wherein:

when the PS-Poll transmission timing changer detects a transition from a real-time processing unnecessary state, in which no communication application requires real-time processing, to a real-time processing necessary state, in which there is at least one communication application that requires real-time processing, the communication control section controls the radio interface section to transmit the PS-Poll using a timer value unrelated to a beacon interval.

24. (original) The radio terminal unit claimed in claim 16, wherein:

when the PS-Poll transmission timing changer detects a transition from a real-time processing unnecessary state, in which no communication application requires real-time processing, to a real-time processing necessary state, in which there is at least one communication application that requires real-time processing, the communication control section controls the radio interface section to transmit the PS-Poll using a timer value unrelated to a beacon interval.

25. (original) The radio terminal unit claimed in claim 17, wherein:

when the PS-Poll transmission timing changer detects a transition from a real-time processing unnecessary state, in which no communication application requires real-time processing, to a real-time processing necessary state, in which there is at least one communication application that requires real-time processing, the communication control section controls the radio interface section to transmit the PS-Poll using a timer value unrelated to a beacon interval.

26. (original) The radio terminal unit claimed in claim 18, wherein:

when the PS-Poll transmission timing changer detects a transition from a real-time processing unnecessary state, in which no communication application requires real-time processing, to a real-time processing necessary state, in which there is at least one communication application that requires real-time processing, the communication control section controls the radio interface section to transmit the PS-Poll using a timer value unrelated to a beacon interval.

27. (original) The radio terminal unit claimed in claim 11, further comprising a parameter determination section for determining the power-saving rate of the radio terminal unit and/ or the priority of communication based on the power-saving rates and/ or the priorities which have been set for the respective communication applications in advance, wherein:

when the PS-Poll transmission timing changer detects a transition from a real-time processing unnecessary state, in which no communication application requires real-time processing, to a real-time processing necessary state, in which there is at least one communication application that requires real-time processing, the communication control section controls the radio interface section to transmit the PS-Poll using a timer value unrelated to a beacon interval; and

the communication control section changes the timer value for controlling the radio interface section according to the power-saving rate and/ or the priority determined by the parameter determination section.

28. (original) The radio terminal unit claimed in claim 12, further comprising a parameter determination section for determining the power-saving rate of the radio terminal unit and/ or the priority of communication based on the power-saving rates and/ or the priorities which have been set for the respective communication applications in advance, wherein:

when the PS-Poll transmission timing changer detects a transition from a real-time processing unnecessary state, in which no communication application requires real-time processing, to a real-time processing necessary state, in which there is at least one communication application that requires real-time processing, the communication control section controls the radio

interface section to transmit the PS-Poll using a timer value unrelated to a beacon interval; and

the communication control section changes the timer value for controlling the radio interface section according to the power-saving rate and/ or the priority determined by the parameter determination section.

29. (original) The radio terminal unit claimed in claim 13, further comprising a parameter determination section for determining the power-saving rate of the radio terminal unit and/ or the priority of communication based on the power-saving rates and/ or the priorities which have been set for the respective communication applications in advance, wherein:

when the PS-Poll transmission timing changer detects a transition from a real-time processing unnecessary state, in which no communication application requires real-time processing, to a real-time processing necessary state, in which there is at least one communication application that requires real-time processing, the communication control section controls the radio interface section to transmit the PS-Poll using a timer value unrelated to a beacon interval; and

the communication control section changes the timer value for controlling the radio interface section according to the power-saving rate and/ or the priority determined by the parameter determination section.

30. (original) The radio terminal unit claimed in claim 14, further comprising a parameter determination section for determining the power-saving rate of the radio terminal unit and/ or the priority of communication based on the power-saving rates and/ or the priorities which have been set for the respective communication applications in advance, wherein:

when the PS-Poll transmission timing changer detects a transition from a real-time processing unnecessary state, in which no communication application requires real-time processing, to a real-time processing necessary state, in which there is at least one communication application that requires real-time processing, the communication control section controls the radio interface section to transmit the PS-Poll using a timer value unrelated to a beacon interval; and

the communication control section changes the timer value for controlling the radio interface section according to the power-saving rate and/ or the priority determined by the parameter determination section.

31. (original) The radio terminal unit claimed in claim 15, further comprising a parameter determination section for determining the power-saving rate of the radio terminal unit and/ or the priority of communication based on the power-saving rates and/ or the priorities which have been set for the respective communication applications in advance, wherein:

when the PS-Poll transmission timing changer detects a transition from a real-time processing unnecessary state, in which no communication application requires real-time processing, to a real-time processing necessary state, in which there is at least one communication application that requires real-time processing, the communication control section controls the radio interface section to transmit the PS-Poll using a timer value unrelated to a beacon interval; and

the communication control section changes the timer value for controlling the radio interface section according to the power-saving rate and/ or the priority determined by the parameter determination section.

32. (original) The radio terminal unit claimed in claim 16, further comprising a parameter determination section for determining the power-saving rate of the radio terminal unit and/ or the priority of communication based on the power-saving rates and/ or the priorities which have been set for the respective communication applications in advance, wherein:

when the PS-Poll transmission timing changer detects a transition from a real-time processing unnecessary state, in which no communication application requires real-time processing, to a real-time processing necessary state, in which there is at least one communication application that requires real-time processing, the communication control section controls the radio

interface section to transmit the PS-Poll using a timer value unrelated to a beacon interval; and

the communication control section changes the timer value for controlling the radio interface section according to the power-saving rate and/ or the priority determined by the parameter determination section.

33. (original) The radio terminal unit claimed in claim 17, further comprising a parameter determination section for determining the power-saving rate of the radio terminal unit and/ or the priority of communication based on the power-saving rates and/ or the priorities which have been set for the respective communication applications in advance, wherein:

when the PS-Poll transmission timing changer detects a transition from a real-time processing unnecessary state, in which no communication application requires real-time processing, to a real-time processing necessary state, in which there is at least one communication application that requires real-time processing, the communication control section controls the radio interface section to transmit the PS-Poll using a timer value unrelated to a beacon interval; and

the communication control section changes the timer value for controlling the radio interface section according to the power-saving rate and/ or the priority determined by the parameter determination section.

34. (original) The radio terminal unit claimed in claim 18, further comprising a parameter determination section for determining the power-saving rate of the radio terminal unit and/ or the priority of communication based on the power-saving rates and/ or the priorities which have been set for the respective communication applications in advance, wherein:

when the PS-Poll transmission timing changer detects a transition from a real-time processing unnecessary state, in which no communication application requires real-time processing, to a real-time processing necessary state, in which there is at least one communication application that requires real-time processing, the communication control section controls the radio interface section to transmit the PS-Poll using a timer value unrelated to a beacon interval; and

the communication control section changes the timer value for controlling the radio interface section according to the power-saving rate and/ or the priority determined by the parameter determination section.

35. (original) The radio terminal unit claimed in claim 11, further comprising:

a parameter determination section for determining the power-saving rate of the radio terminal unit and/ or the priority of communication based on the power-saving rates and/ or the priorities which have been set for the respective communication applications in advance; and

a battery charge detector for detecting the remaining amount of battery charge, wherein:

when the PS-Poll transmission timing changer detects a transition from a real-time processing unnecessary state, in which no communication application requires real-time processing, to a real-time processing necessary state, in which there is at least one communication application that requires real-time processing, the communication control section controls the radio interface section to transmit the PS-Poll using a timer value unrelated to a beacon interval; and

the communication control section changes the timer value for controlling the radio interface section according to the power-saving rate and/ or the priority determined by the parameter determination section based on the remaining amount of battery charge detected by the battery charge detector.

36. (original) The radio terminal unit claimed in claim 12, further comprising:

a parameter determination section for determining the power-saving rate of the radio terminal unit and/ or the priority of communication based on the power-saving rates and/ or the priorities which have been set for the respective communication applications in advance; and

a battery charge detector for detecting the remaining amount of battery charge, wherein:

when the PS-Poll transmission timing changer detects a transition from a real-time processing unnecessary state, in which no communication application requires real-time processing, to a real-time processing necessary state, in which there is at least one communication application that requires real-time processing, the communication control section controls the radio interface section to transmit the PS-Poll using a timer value unrelated to a beacon interval; and

the communication control section changes the timer value for controlling the radio interface section according to the power-saving rate and/ or the priority determined by the parameter determination section based on the remaining amount of battery charge detected by the battery charge detector.

37. (original) The radio terminal unit claimed in claim 13, further comprising:

a parameter determination section for determining the power-saving rate of the radio terminal unit and/ or the priority of communication based on the power-saving rates and/ or the priorities which have been set for the respective communication applications in advance; and

a battery charge detector for detecting the remaining amount of battery charge, wherein:

when the PS-Poll transmission timing changer detects a transition from a real-time processing unnecessary state, in which no communication application requires real-time processing,

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to a real-time processing necessary state, in which there is at least one communication application that requires real-time processing, the communication control section controls the radio interface section to transmit the PS-Poll using a timer value unrelated to a beacon interval; and

the communication control section changes the timer value for controlling the radio interface section according to the power-saving rate and/ or the priority determined by the parameter determination section based on the remaining amount of battery charge detected by the battery charge detector.

38. (original) The radio terminal unit claimed in claim 14, further comprising:

a parameter determination section for determining the power-saving rate of the radio terminal unit and/ or the priority of communication based on the power-saving rates and/ or the priorities which have been set for the respective communication applications in advance; and

a battery charge detector for detecting the remaining amount of battery charge, wherein:

when the PS-Poll transmission timing changer detects a transition from a real-time processing unnecessary state, in which no communication application requires real-time processing, to a real-time processing necessary state, in which there is at least one communication application that requires real-time processing, the communication control section controls the radio

interface section to transmit the PS-Poll using a timer value unrelated to a beacon interval; and

the communication control section changes the timer value for controlling the radio interface section according to the power-saving rate and/ or the priority determined by the parameter determination section based on the remaining amount of battery charge detected by the battery charge detector.

39. (original) The radio terminal unit claimed in claim 15, further comprising:

a parameter determination section for determining the power-saving rate of the radio terminal unit and/ or the priority of communication based on the power-saving rates and/ or the priorities which have been set for the respective communication applications in advance; and

a battery charge detector for detecting the remaining amount of battery charge, wherein:

when the PS-Poll transmission timing changer detects a transition from a real-time processing unnecessary state, in which no communication application requires real-time processing, to a real-time processing necessary state, in which there is at least one communication application that requires real-time processing, the communication control section controls the radio interface section to transmit the PS-Poll using a timer value unrelated to a beacon interval; and

the communication control section changes the timer value for controlling the radio interface section according to the power-saving rate and/ or the priority determined by the parameter determination section based on the remaining amount of battery charge detected by the battery charge detector.

40. (original) The radio terminal unit claimed in claim 16, further comprising:

a parameter determination section for determining the power-saving rate of the radio terminal unit and/ or the priority of communication based on the power-saving rates and/ or the priorities which have been set for the respective communication applications in advance; and

a battery charge detector for detecting the remaining amount of battery charge, wherein:

when the PS-Poll transmission timing changer detects a transition from a real-time processing unnecessary state, in which no communication application requires real-time processing, to a real-time processing necessary state, in which there is at least one communication application that requires real-time processing, the communication control section controls the radio interface section to transmit the PS-Poll using a timer value unrelated to a beacon interval; and

the communication control section changes the timer value for controlling the radio interface section according to the power-saving rate and/ or the priority determined by the

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parameter determination section based on the remaining amount of battery charge detected by the battery charge detector.

41. (original) The radio terminal unit claimed in claim 17, further comprising:

a parameter determination section for determining the power-saving rate of the radio terminal unit and/ or the priority of communication based on the power-saving rates and/ or the priorities which have been set for the respective communication applications in advance; and

a battery charge detector for detecting the remaining amount of battery charge, wherein:

when the PS-Poll transmission timing changer detects a transition from a real-time processing unnecessary state, in which no communication application requires real-time processing, to a real-time processing necessary state, in which there is at least one communication application that requires real-time processing, the communication control section controls the radio interface section to transmit the PS-Poll using a timer value unrelated to a beacon interval; and

the communication control section changes the timer value for controlling the radio interface section according to the power-saving rate and/ or the priority determined by the parameter determination section based on the remaining amount of battery charge detected by the battery charge detector.

42. (original) The radio terminal unit claimed in claim 18, further comprising:

a parameter determination section for determining the power-saving rate of the radio terminal unit and/ or the priority of communication based on the power-saving rates and/ or the priorities which have been set for the respective communication applications in advance; and

a battery charge detector for detecting the remaining amount of battery charge, wherein:

when the PS-Poll transmission timing changer detects a transition from a real-time processing unnecessary state, in which no communication application requires real-time processing, to a real-time processing necessary state, in which there is at least one communication application that requires real-time processing, the communication control section controls the radio interface section to transmit the PS-Poll using a timer value unrelated to a beacon interval; and

the communication control section changes the timer value for controlling the radio interface section according to the power-saving rate and/ or the priority determined by the parameter determination section based on the remaining amount of battery charge detected by the battery charge detector.

43. (original) A radio communication system which is a radio network system, comprising:

one or more radio base stations; and

one or more radio terminal units claimed in claim 1.

44. (original) A radio communication system which is a radio network system, comprising:

one or more radio base stations; and

one or more radio terminal units claimed in claim 2.

45. (original) A radio communication system which is a radio network system, comprising:

one or more radio base stations; and

one or more radio terminal units claimed in claim 3.

46. (original) A radio communication system which is a radio network system, comprising:

one or more radio base stations; and

one or more radio terminal units claimed in claim 4.

47. (original) A radio communication system which is a radio network system, comprising:

one or more radio base stations; and

one or more radio terminal units claimed in claim 5.

48. (original) A radio communication system which is a radio network system, comprising:

one or more radio base stations; and

one or more radio terminal units claimed in claim 6.

49. (original) A radio communication system which is a radio network system, comprising:

one or more radio base stations; and

one or more radio terminal units claimed in claim 7.

50. (original) A radio communication system which is a radio network system, comprising:

one or more radio base stations; and

one or more radio terminal units claimed in claim 8.

51. (original) A radio communication system which is a radio network system, comprising:

one or more radio base stations; and

one or more radio terminal units claimed in claim 9.

52. (original) A radio communication system which is a radio network system, comprising:

one or more radio base stations; and

one or more radio terminal units claimed in claim 10.

53. (original) A radio communication system which is a radio network system, comprising:

one or more radio base stations; and

one or more radio terminal units claimed in claim 11.

54. (original) A radio communication system which is a radio network system, comprising:

one or more radio base stations; and

one or more radio terminal units claimed in claim 12.

55. (original) A radio communication system which is a radio network system, comprising:

one or more radio base stations; and

one or more radio terminal units claimed in claim 13.

56. (original) A radio communication system which is a radio network system, comprising:

one or more radio base stations; and

one or more radio terminal units claimed in claim 14.

57. (original) A radio communication system which is a radio network system, comprising:

one or more radio base stations; and

one or more radio terminal units claimed in claim 15.

58. (original) A radio communication system which is a radio network system, comprising:

one or more radio base stations; and

one or more radio terminal units claimed in claim 16.

59. (original) A radio communication system which is a radio network system, comprising:

one or more radio base stations; and

one or more radio terminal units claimed in claim 17.

60. (original) A radio communication system which is a radio network system, comprising:

one or more radio base stations; and

one or more radio terminal units claimed in claim 18.

61. (original) A radio communication system which is a radio network system, comprising:

one or more radio base stations; and

one or more radio terminal units claimed in claim 19.

62. (original) A radio communication system which is a radio network system, comprising:

one or more radio base stations; and

one or more radio terminal units claimed in claim 20.

63. (original) A radio communication system which is a radio network system, comprising:

one or more radio base stations; and

one or more radio terminal units claimed in claim 21.

64. (original) A radio communication system which is a radio network system, comprising:

one or more radio base stations; and

one or more radio terminal units claimed in claim 22.

65. (original) A radio communication system which is a radio network system, comprising:

one or more radio base stations; and

one or more radio terminal units claimed in claim 23.

66. (original) A radio communication system which is a radio network system, comprising:

one or more radio base stations; and

one or more radio terminal units claimed in claim 24.

67. (original) A radio communication system which is a radio network system, comprising:

one or more radio base stations; and

one or more radio terminal units claimed in claim 25.

68. (original) A radio communication system which is a radio network system, comprising:

one or more radio base stations; and

one or more radio terminal units claimed in claim 26.

69. (original) A radio communication system which is a radio network system, comprising:

one or more radio base stations; and

one or more radio terminal units claimed in claim 27.

70. (original) A radio communication system which is a radio network system, comprising:

one or more radio base stations; and

one or more radio terminal units claimed in claim 28.

71. (original) A radio communication system which is a radio network system, comprising:

one or more radio base stations; and

one or more radio terminal units claimed in claim 29.

72. (original) A radio communication system which is a radio network system, comprising:

one or more radio base stations; and

one or more radio terminal units claimed in claim 30.

73. (original) A radio communication system which is a radio network system, comprising:

one or more radio base stations; and

one or more radio terminal units claimed in claim 31.

74. (original) A radio communication system which is a radio network system, comprising:

one or more radio base stations; and

one or more radio terminal units claimed in claim 32.

75. (original) A radio communication system which is a radio network system, comprising:

one or more radio base stations; and

one or more radio terminal units claimed in claim 33.

76. (original) A radio communication system which is a radio network system, comprising:

one or more radio base stations; and

one or more radio terminal units claimed in claim 34.

77. (original) A radio communication system which is a radio network system, comprising:

one or more radio base stations; and

one or more radio terminal units claimed in claim 35.

78. (original) A radio communication system which is a radio network system, comprising:

one or more radio base stations; and

one or more radio terminal units claimed in claim 36.

79. (original) A radio communication system which is a radio network system, comprising:

one or more radio base stations; and

one or more radio terminal units claimed in claim 37.

80. (original) A radio communication system which is a radio network system, comprising:

one or more radio base stations; and

one or more radio terminal units claimed in claim 38.

81. (original) A radio communication system which is a radio network system, comprising:

one or more radio base stations; and

one or more radio terminal units claimed in claim 39.

82. (original) A radio communication system which is a radio network system, comprising:

one or more radio base stations; and

one or more radio terminal units claimed in claim 40.

83. (original) A radio communication system which is a radio network system, comprising:

one or more radio base stations; and

one or more radio terminal units claimed in claim 41.

84. (original) A radio communication system which is a radio network system, comprising:

one or more radio base stations; and

one or more radio terminal units claimed in claim 42.

85. (new) The radio terminal unit claimed in claim 1, wherein:

when the PS-Poll transmission timing changer detects a transition from a real-time processing unnecessary state, in which no communication application requires real-time processing,

to a real-time processing necessary state, in which there is at least one communication application that requires real-time processing, the communication control section controls the radio interface section to transmit the PS-Poll using a timer value unrelated to a beacon interval.

AMENDMENTS TO THE DRAWINGS:

The replacement sheet in the Appendix includes changes to Figure 1. In Figure 1, the previously omitted designation "Prior Art" has been added.

REMARKS

The specification and Figure 1 have been amended to make editorial changes therein.

The indication that claims 19-42 and 61-84 include patentable subject matter is acknowledged with thanks. In reliance thereon, the subject matter of claim 19 has been included in new claim 85 that depends from claim 1. Consideration and allowance of new claim 85 are respectfully requested because this claim includes subject matter indicated to be allowable.

Claims 1-2 and 43-44 were rejected as anticipated by YAMATO 6,954,651. Reconsideration and withdrawal of the rejection are respectfully requested.

Claim 1 defines a radio terminal unit that includes a PS-Poll transmission timing changer for changing the timing of transmission of PS-Polls (which request delivery of packets buffered by the radio base station) according to the operation mode of a communication application running on the radio terminal unit.

YAMATO do not disclose a radio terminal unit that changes the timing of signals that request delivery of packets buffered by the radio base station according to the operation mode of a communication application running on the radio terminal unit, and thus claims 1-2 and 43-44 avoid this rejection under §102.

YAMATO (Figure 7; column 10, lines 29-45) describe a system in which a change in the guaranteed data transmission rate for a connection having the radio terminal as a source is recognized and a change of time-out interval is requested. When the radio terminal recognizes a change of the data transmission rate, the radio terminal notifies the radio base station. However, there is no mention of a PS-Poll signal or a change of timing of such a PS-Poll signal. The method by which the base station is notified of the change in transmission rate is not necessarily a change in polling signal timing. Further, the reference does not relate a change in timing of a poll signal to an operation mode of a communication application running on the terminal. The change in timing could be directed by the base station or based on other factors (e.g., environment) and is not necessarily according to an operation mode of a communication application on the terminal.

Claims 1-2 and 43-44 were rejected as anticipated by MEGGERS et al. 6,728,270. Reconsideration and withdrawal of the rejection are respectfully requested.

MEGGERS et al. also do not disclose a radio terminal unit that changes the timing of signals that request delivery of packets buffered by the radio base station according to the operation mode of a communication application running on the radio terminal unit, and thus claims 1-2 and 43-44 avoid this rejection under §102.

MEGGERS et al. disclose a system for controlling packet data traffic in which minimum and maximum throughput are set and the throughput is varied within this range (column 9, lines 6-49). However, there is no mention of a PS-Poll signal or a change of timing of such a PS-Poll signal. The method by which the throughput is varied does not necessarily involve a change in polling signal timing (indeed, no polling signal is disclosed). Further, the reference does not relate a change in timing of a poll signal to an operation mode of a communication application running on the terminal. The change in throughput could be directed by the base station or based on other factors (e.g., environment) and is not necessarily according to an operation mode of a communication application on the terminal.

Claims 3-18 and 45-60 were rejected as unpatentable over MEGGERS et al. Reconsideration and withdrawal of the rejection are respectfully requested for the reasons set forth above. Each of these claims includes the subject matter of claim 1, which is missing from MEGGERS et al. as explained above and would not be obvious to one of skill in the art.

In view of the present amendment and the foregoing remarks, it is believed that the present application has been placed in condition for allowance. Reconsideration and allowance are respectfully requested.

Please charge the fee of $50 for the extra claim of any type added herewith, to Deposit Account No. 25-0120.

MEGGERS et al. disclose a system for controlling packet data traffic in which minimum and maximum throughput are set and the throughput is varied within this range (column 9, lines 6-49). However, there is no mention of a PS-Poll signal or a change of timing of such a PS-Poll signal. The method by which the throughput is varied does not necessarily involve a change in polling signal timing (indeed, no polling signal is disclosed). Further, the reference does not relate a change in timing of a poll signal to an operation mode of a communication application running on the terminal. The change in throughput could be directed by the base station or based on other factors (e.g., environment) and is not necessarily according to an operation mode of a communication application on the terminal.

Claims 3-18 and 45-60 were rejected as unpatentable over MEGGERS et al. Reconsideration and withdrawal of the rejection are respectfully requested for the reasons set forth above. Each of these claims includes the subject matter of claim 1, which is missing from MEGGERS et al. as explained above and would not be obvious to one of skill in the art.
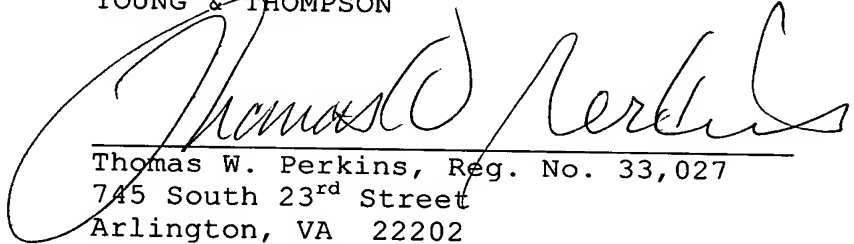
In view of the present amendment and the foregoing remarks, it is believed that the present application has been placed in condition for allowance. Reconsideration and allowance are respectfully requested.

Please charge the fee of $50 for the extra claim of any type added herewith, to Deposit Account No. 25-0120.

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The Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 25-0120 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17.

Respectfully submitted,

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TWP/lk

APPENDIX:

The Appendix includes the following item:

- one replacement drawing sheet